



# National Vineyard Register

## Consultation paper

*November 2024*

### Purpose of the consultation paper

The purpose of this consultation paper is to seek feedback on the development of the National Vineyard Register (NVR) – in particular:

- the benefits and features it should offer,
- the data it should or could collect, and how that data should be collected,
- how it might interact with other sector-wide programs and applications, and
- who should manage, own and fund the ongoing maintenance and operation of the register.

Feedback on the key questions around the NVR framework is invited from stakeholders in the grape and wine sector, including growers, wine producers, industry associations, agribusinesses and partnering organisations.

### [How to make a submission](#)

The consultation paper is split into two sections:

1. The **Consultation paper in brief** is a summary that addresses the key areas with hyperlinks to more information on each area, allowing you to choose how much information to read.
2. The [Consultation paper in full](#) includes all the information in a continuous format. It also has a table of contents to help you navigate through the sections.

You can also find the full paper on the Wine Australia website

[www.wineaustralia.com/nvr](http://www.wineaustralia.com/nvr)

## The consultation paper in brief

### Background and context

The National Vineyard Register (NVR) Framework Project is funded by the Department of Agriculture, Fisheries and Forestry (DAFF), as part of its *Grape and Wine Sector Long-term Viability Support Package* to support the Australian grape and wine sector to reach long-term sustainability through new initiatives that assist growers and producers.

[Read more about the terms of reference for the National Vineyard Register Framework Project](#)

Feedback from the sector during 2023–24, as part of the One Grape & Wine Sector Plan consultation process, identified the imbalance of supply and demand as the single most urgent challenge requiring immediate support and action. A need was identified for a vineyard register that would be able to provide insights into the national supply base, capturing key data on plantings to support better decision-making.

[Read more about the rationale for a National Vineyard Register](#)

Historically, the Australian Bureau of Statistics (ABS) collected and published annual vineyard area data by Geographical Indication (GI) and variety. However, this collection was discontinued in 2015.

Since then, attempts by Wine Australia on behalf of the sector to collect detailed, up-to-date information on vineyard plantings at a national level have had limited success, mainly due to lack of participation from growers.

[Read more about previous national vineyard data collections in Australia](#)

Although there is currently no national vineyard register or database of plantings, there are some state and regional collections, as well as datasets, mapping platforms and registers in other agricultural and horticultural sectors, and international vineyard registers – eg in New Zealand and South Africa. These other examples provide insights into what a national vineyard register could look like and how it could potentially be built.

[Read more about other registers and platforms that we can learn from](#)

### What data should the National Vineyard Register collect?

The primary purpose of the National Vineyard Register is to provide better data on our vineyard supply base that enables growers and winemakers to make more informed decisions on planting requirements to meet market demand. The core data requirements to achieve this are:

- area of vineyards by variety, location and age,
- changes in plantings in a timely manner and
- ownership details.

Additional features and functionality could be included that would benefit the sector – for example in terms of reduced costs of compliance, more efficient and better targeted vineyard management, improved biosecurity, facilitated technology adoption, sustainability, traceability and provenance. For example:

- geospatial location (ie accurate vineyard position, size and shape – not just what GI the vineyard block is in),
- additional planting attributes such as rootstock, clone, yield,
- records relating to compliance requirements such as the Label Integrity Program, levies collection, spray diaries, biosecurity-related records and
- functionality that would allow integration and interoperability with other data platforms.

[Read more about data requirements and options for the National Vineyard Register](#)

### **Consultation questions on data**

What data should the National Vineyard Register collect?

- What are the ‘must haves’ and the ‘nice to haves’?
- Is there anything that definitely should not be collected?
- What protections should be put in place to protect the data security and privacy?
- How often should the data be updated?
- What limitations should there be on how the data is used?
- What outputs should be provided? (e.g. a dashboard of summary statistics, individual benchmarks, regular articles / presentations on the insights from the data)

### **How should the data be collected?**

The data for the National Vineyard Register could be collected directly from growers, or indirectly via other sources – or possibly as a mix of these. The method chosen will fundamentally affect how the register or platform is built, what data it can collect and what other benefits can be derived from it.

[Read more about the pros and cons of each data collection method](#)

## Consultation questions on data collection

How should the data for the NVR be collected?

- Which method is likely to be most acceptable, and why?
- What level of accuracy (coverage) is required or appropriate in order to produce meaningful information?
- What is the best way to achieve the necessary or desirable level of accuracy?
- If data collection were mandatory, what protections, limitations or requirements do you feel are necessary?
- Do you believe a non-mandatory collection of data would achieve sufficient coverage to make the NVR effective?

## How should the National Vineyard Register be maintained and resourced?

The success of the NVR will depend on its financial sustainability in the long term.

Whichever solution is chosen for building the NVR, significant ongoing resourcing will be needed after implementation for the management of the Register, maintenance of the technology, ongoing software and licensing costs, and ongoing support for the users of the system – in addition to the data analysis and checking, reporting and dissemination of the information and insights produced.

While the development of the NVR has been funded by the Commonwealth Government, the full roll-out and ongoing management is not funded, and thus annual funding will need to be sourced. This could come from the Commonwealth Government, industry levies or potentially a user-pays approach (or a combination of sources).

Another related consideration is who should manage the NVR. Consideration needs to be given to which organisation has the capacity, security, capability and mandate for such an important function. Funding and ownership could potentially be separate from management.

## Consultation questions on maintenance of the National Vineyard Register

How should the NVR be maintained and resourced in the long run?

- Who should own it?
- Who should manage it?
- How should it be funded?
- Would there be any support for a user-pays model (e.g. for some functions / benefits of the NVR)?

## How to make a submission

Feedback on the key questions around the NVR framework is invited from stakeholders in the grape and wine sector, including growers, wine producers, industry associations, agribusinesses and partnering organisations.

Questions raised in this consultation paper are intended as a guide only. You are invited to cover all questions or only some, depending on your interests. You may also provide more general comments and examples or case studies.

Submissions can be made using our [online form](#) or by emailing a written submission to: [market.insights@wineaustralia.com](mailto:market.insights@wineaustralia.com)

If you provide a stand-alone submission, please include your name, describe who your submission is on behalf of, and outline your role and your organisation's role in the wine sector.

**Submissions open on 7 November 2024.**

**Closing date for submissions is 30 November 2024.**

## Confidentiality

You may provide public or confidential submissions to this consultation process. If you do provide a confidential submission, your de-identified feedback may be included in a published summary report of submissions. Please note that a request may be made under the *Freedom of Information Act 1982* for access to a submission, including a submission marked 'confidential'. Such requests, including determining whether information is exempt from release, will be handled in accordance with provisions of the *Freedom of Information Act 1982*.

## More information

For more information, visit [www.wineaustralia.com/nvr](http://www.wineaustralia.com/nvr) or email the project manager Sandy Hathaway [sandy.hathaway@wineaustralia.com](mailto:sandy.hathaway@wineaustralia.com)

# Consultation paper in full

## Table of Contents

Purpose of the consultation paper .....	1
The consultation paper in brief.....	2
How to make a submission .....	5
More information.....	5
Consultation paper in full .....	6
What is the National Vineyard Register Framework Project? .....	7
Terms of reference for the project.....	7
Why a National Vineyard Register – and why now? .....	8
Current challenges .....	8
Response to the challenges .....	8
What is the history of national vineyard data collections in Australia?.....	10
ABS National Vineyard Survey (1329.0).....	10
Foundation data project (VinSites) .....	10
The National Vineyard Scan .....	11
Using data science to calculate area based on crush.....	11
What other registers and platforms already exist that we can learn from? .....	12
Existing vineyard registers / databases in Australian viticulture .....	12
Existing vineyard registers / databases globally.....	13
Existing land use / datasets for other agricultural sectors in Australia .....	14
What does the sector need from a National Vineyard Register? .....	14
Minimum requirements for the National Vineyard Register .....	14
Additional potential features for the National Vineyard Register .....	15
Consultation questions on data .....	17
How should the data be collected? .....	18
Direct collection from growers via a survey.....	18
Grower login to an online platform .....	19
Indirect data collection or mixed method .....	19
Consultation questions on data collection .....	20
How should the Register be maintained and resourced?.....	21
Consultation questions on register ownership, management and funding.....	21

## What is the National Vineyard Register Framework Project?

The National Vineyard Register (NVR) Framework Project is funded by the Department of Agriculture, Fisheries and Forestry (DAFF), as part of its \$3.5 million *Grape and Wine Sector Long-term Viability Support Package* to support the Australian grape and wine sector to reach long term sustainability through new initiatives to assist growers and producers.

DAFF have contributed \$1m funding for the development of a framework and establishment of the National Vineyard Register by Wine Australia.

### Terms of reference for the project

The DAFF project requires Wine Australia to establish a national register of data on the area of bearing and non-bearing vines, the age profile of vines, varieties planted and location by geographical indication.

Wine Australia is required to finalise a project plan by December 2024 and complete the implementation plan by June 2025. Subject to the framework being feasible, including the investment required and likely completion times for legislative amendments (if required), the register is required to be implemented by June 2026.

The project will involve extensive consultation with stakeholder groups including grapegrowers and winemakers from all wine-producing regions, industry bodies and state and regional wine associations.

[Back to top of paper](#)

## Why a National Vineyard Register – and why now?

The Australian grape and wine sector consists of more than 2,000 wineries and 6,000 grape growers operating across 65 winegrowing regions.<sup>1</sup>

With more than 100 grape varieties cultivated across nearly 150,000 hectares, the sector has a long-term average production of approximately 1.73 million tonnes of wine grapes, yielding around 1.25 billion litres of wine. Australia's vineyards, with their variation of grape varieties, climatic conditions and wine styles, form a diverse wine sector with thousands of products exported to more than 100 global markets and catering to a wide range of consumer preferences.

### Current challenges

The Australian wine sector is currently grappling with a significant oversupply of red wine grapes, particularly the major varieties like Cabernet Sauvignon, Merlot, and Shiraz from inland irrigated regions.

While the temporary loss of China, the largest export market by value for Australian wine, was a significant contributor to the oversupply over the last three years, long-term structural supply and demand imbalances have been evident in the sector for decades. The global downturn in wine consumption, trends towards other alcoholic beverages, supply chain issues and increasing costs have also contributed to the current acute issue.

According to Wine Australia's 2023 *Production, Sales, and Inventory Report*<sup>2</sup>, there is an estimated 2.2 billion litres of wine in inventory, 288 million litres above the 10-year average. The situation is worsening, with more growers in 2024 unable to find buyers for their grapes than in previous years. Forecasts from ABARES<sup>3</sup> suggest red winegrape prices will continue to drop in 2024–25.

### Response to the challenges

#### One Grape & Wine Sector Plan (OGWSP)

Wine Australia and Australian Grape & Wine led a sector-wide consultation process throughout 2023–24 to develop and refine a set of priorities and actions for the wine sector.

Consultation feedback identified the imbalance of supply and demand as the single most urgent challenge requiring immediate support and action. A need was identified

---

<sup>1</sup> *Wine Sector at a Glance*, Wine Australia 2023

<sup>2</sup> 2023 Wine Australia Production, Sales, and Inventory Report

<sup>3</sup> The [Australian Bureau of Agricultural and Resource Economics and Sciences](#)



for a vineyard register that would be able to provide insight into the national supply base, capturing key data on plantings to support better decision-making.

### **Viticulture and Wine Sector Working Group**

In March 2024, federal, state and territory Agriculture Ministers also recognised the urgent issues facing Australian grape growers, particularly in the inland regions.<sup>4</sup>

The Ministers established the *Viticulture and Wine Sector Working Group*, which was tasked with developing a national strategy to address the red wine oversupply and guide the sector to a balanced and profitable state.

The Working Group commissioned a report by Emeritus Professor Kym Anderson AC of the Wine Economics Research Centre at the University of Adelaide.

The Anderson report<sup>5</sup> highlighted critical gaps in supply and demand data and proposed solutions to restore balance.

One of its central recommendations was the creation of a national vineyard register, to provide the sector with better information to guide decision-making. Anderson argued:

*“Since prospective responses by vignerons to climate change include altering the mix of winegrape varieties in their vineyards or seeking cooler-climate sites to avoid changing varieties, better information to guide such decision-making is needed. However, official vine area data on annual winegrape plantings and removals by variety and region have not been collected since 2015 in states other than South Australia. Broadening that area data-gathering exercise to non-SA states is essential for improving investor and industry planning – and was recommended nearly a decade ago by a Senate enquiry (Rural and Regional Affairs and Transport References Committee 2016).” (pg 63)*

### **Government response: the \$3.5 million support package**

In June 2024, the Department for Agriculture, Fisheries and Forestry (DAFF) responded by announcing a \$3.5 million *Grape and Wine Sector Long-term Viability Support Package* to support the long-term sustainability of the sector.

This funding included \$1 million for the establishment of a national vineyard register.

[Back to top of paper](#)

---

<sup>4</sup> Viticulture And Wine Sector Working Group Final Report

<sup>5</sup> *The Current Wine Crisis: Ways Forward in Australia's Wine Regions 2024*

## What is the history of national vineyard data collections in Australia?

For the past 10 years, the Australian wine industry has lacked detailed, up-to-date information on vineyard plantings at a national level.

The Australian Bureau of Statistics (ABS) Vineyard Survey provided the wine sector with accurate, complete data on vineyard plantings and yield by variety and region from 1973 to 2015, when the collection stopped. To alleviate the resulting gap in essential foundation data, Wine Australia has undertaken several initiatives over the last decade on behalf of the sector; however, none have replaced the ABS data or solved the problem of lack of accurate data by variety and region.

### ABS National Vineyard Survey (catalogue number 1329.0)

Up until 2015, the Australian Bureau of Statistics (ABS) collected a range of statistics on the Australian wine sector at no direct charge to the wine sector levy-payers. Among these statistics were annual vineyard area (including bearing and non-bearing area) and tonnes crushed by Geographical Indication (GI) and variety. This enabled a time series of vineyard planting and production data going back to the late 1960s, allowing analysis of changes in the supply base across Australia by variety and region. The ABS had statutory powers to enforce the collection of data from growers and thus its Vineyard Survey was a census of grape growers, ensuring a very accurate collection. However, due to funding cuts, the ABS started charging the sector (via Wine Australia) to collect this data for a short time from 2009 – 2015 (circa \$900,000 per year) before they ceased the collection completely in 2015 due to lack of resources.

### Foundation data project (VinSites)

The first industry-funded vineyard data project run by Wine Australia, known as VinSites (2016–2017), proposed the development of an online platform for grape growers to register their vineyard details, including variety and region plantings, removals and tonnage data. This project failed to deliver an accurate picture of planting data for several reasons. First, contacting growers and requesting their information proved problematic without an existing register of contact details. Vinehealth Australia sent letters to their database of growers in South Australia, seeking permission to share their data with Wine Australia and/or encouraging them to register with the VinSites platform, but this was also unsuccessful in attracting significant numbers of growers, as was a campaign of personal visits to two targeted regions to recruit participants. The conclusions from the VinSites project were that a vineyard register with sufficient coverage to provide accurate statistics could not succeed without it being a census, and this would require provision of the data by growers to be mandated by legislation. The project also concluded that a successful platform must ensure privacy and confidentiality, and must provide a benefit to those contributing data.

## The National Vineyard Scan

The National Vineyard Scan was a three-year project (2017-2019) in collaboration with Consilium Technology<sup>6</sup>, using satellite imagery and machine learning to map vineyard blocks by GI region.

While successful in identifying vineyard areas and locations, it had significant limitations. High imagery costs made annual updates unaffordable, and inconsistent imagery availability made year-to-year tracking difficult. The scan couldn't identify key details like grape variety, ownership or type of grape (wine, table or dried grapes).

Consilium Technology developed a platform for growers to 'claim' their vineyards and input data, but – as for VinSites – grower participation was minimal, with fewer than 100 growers/users by the project's end, despite the fact that the platform offered additional value-added features such as hyperspectral imagery, soil and climate data to help with vineyard management activities.

Due to these limitations and costs, Wine Australia chose not to invest in further scans, and the vineyard map and area estimate have not been updated since 2019.

## Using data science to calculate area based on crush

In 2021, Wine Australia commissioned a data scientist to attempt to calculate vineyard area, working backwards from the crush data collected in the annual National Vintage Survey<sup>7</sup>, and using historical yield data derived from existing data sources such as the National Vineyard Scan and the ABS Vineyard Survey. Unfortunately, this also proved unsuccessful due to the significant variations in yield across seasons, regions and varieties, major inaccuracies around smaller varieties and regions where the non-response rate to the National Vintage Survey is up to 50 per cent, as well as the inability of such a model to deal with bearing vs non-bearing area, or grapes that are not crushed. It also (self-evidently) could not provide ownership details for growers, greatly limiting its potential usefulness beyond very broad estimates of overall area by variety for the larger varieties and regions.

[Back to top of paper](#)

---

<sup>6</sup> Now operating as [Green Brain](#)

<sup>7</sup> A voluntary survey of all wineries that collects crush data.

## What other registers and platforms already exist that we can learn from?

To identify the requirements, opportunities and outcomes required of the proposed National Vineyard Register (NVR), it will be important to understand what other databases, registers and platforms already exist in viticulture and agriculture. Broadly speaking, these can be grouped into three categories:

1. existing vineyard registers / databases in Australian viticulture,
2. existing vineyard registers / databases globally and
3. existing land use / datasets for other agricultural sectors in Australia (or possibly overseas)

### Existing vineyard registers / databases in Australian viticulture

In Australia, vineyard data collections exist at a state and regional level, to varying degrees of completeness, accuracy and functionality. Whilst some of these collections are mandatory, most datasets are incomplete and are not used for understanding supply and demand requirements at the regional level. Datasets are primarily used by regional associations to contact their members with information relating to regional activities.

#### **Vinehealth Australia vineyard register**

Probably the most complete example of a vineyard register in Australia is the one maintained by [Vinehealth Australia](#) in South Australia. Vinehealth Australia (VHA) is an independent statutory authority in South Australia, established under the *Phylloxera and Grape Industry Act 1995*.

Vineyard owners with 0.5 hectares or more under vine are required under the *Phylloxera and Grape Industry Act 1995* to register their planting and property location details with VHA's vineyard register. The primary purpose of the register is to facilitate VHA's role of protecting South Australian vineyards from pests and diseases, and responding effectively if incursions occur.

The particulars of the VHA vineyard register include details of the landowner's name and address, the location of the vineyard, varieties, age of the vines, source of the vines and area planted, all of which are necessary for managing biosecurity threats. This dataset in its current form is limited to a statewide scope and has not been set up specifically to facilitate aggregated data reporting and analysis.

## **MapVit**

MapVit is an example of a fully geospatial platform where growers log in and enter their vineyard details including identifying every row by variety, and can extract reports and maps to support other applications and technologies. It was built for McLaren Vale Grape, Wine and Tourism Association to support the regional adoption of ‘agtech’. To date, approximately 10 per cent of growers in the region have signed up to the MapVit platform as part of a trial (which included a small cost to the users).

## **Winery databases**

Wineries generally have comprehensive information about vineyards owned by growers with whom they have contracts – including block size and location, variety, age, rootstock/clone, yield history and ownership details. It is likely that the largest 30 wineries would hold information on over 75 per cent of the vineyard plantings in Australia – particularly in the warm inland regions. However, the other 25 per cent of vineyard area across the rest of the Australian winegrowing regions, owned by approximately 4000 independent grapegrowers and winery vineyards, is not likely to be covered to the same extent.

## **Existing vineyard registers / databases globally**

Globally, many wine-producing countries like France, Spain, South Africa, Italy, New Zealand and even the state of California in the US, have well-established vineyard registers, although some face limitations regarding data sharing across regions. For example, the European Union mandates vineyard registers as part of its Common Agricultural Policy (CAP), but the level of detail and the accessibility of the data can vary between member states.

In New Zealand, the wine industry has a well-structured, centralised vineyard register managed by New Zealand Winegrowers (NZW).

All vineyards owned by NZW members are required to have an annual biosecurity vineyard registration. This includes all producing vineyards, newly planted vineyards that will produce a crop within the next three years and any non-productive vineyards that are likely to be used for future commercial wine production.

The main purpose of the register is to ensure that, in the event of a new vineyard pest or disease arriving in New Zealand, the NZW biosecurity team can contact all growers in the at-risk area as soon as possible and keep them informed regarding the outbreak and any response.

## Existing land use / datasets for other agricultural sectors in Australia

A number of platforms and databases exist in Australian agricultural and horticultural sectors. These serve a variety of purposes with diverse methods for collecting and disseminating data.

Similar to the VHA Vineyard Register in South Australia, these dashboards help manage biosecurity threats by locating and informing landowners about threats and incursions within their geospatial range. Additionally, they offer critical data-driven insights for growers, industry stakeholders and policymakers, enabling better decision-making in areas such as water allocation, biosecurity, pest management, and climate adaptation.

The mapping dashboards help monitor land use changes, assess crop health, and forecast production levels, all of which are essential for managing supply chains and responding to market demand. For example, knowing the distribution of orchards allows for more effective disease and pest monitoring, thus reducing the risk of outbreaks that could devastate the industry. Additionally, these platforms support sustainability efforts by helping stakeholders understand how tree crops interact with local ecosystems, including water usage and environmental impact.

[Back to top of paper](#)

## What does the sector need from a National Vineyard Register?

The idea of a National Vineyard Register (NVR) means different things to different people. As illustrated above, there are many models already in existence that record various pieces of information about vineyards or other agricultural plantings in various ways, and offer a range of other features and benefits. The challenge is to agree on a preferred model for the NVR that will meet the expectations and requirements of the sector, so that it receives the support required from the sector to ensure its success.

### Minimum requirements for the National Vineyard Register

The primary purpose of the NVR is to assist the sector in addressing the current over-supply, and more generally to provide better data on our vineyard supply base that enables growers and winemakers to make more informed decisions on planting requirements to meet market demand.

To do this, the sector needs to know:

- what **area** of vineyards is planted **by variety**;
- **where** vineyards are planted; and
- the **potential or actual yield** (production) from the vineyards.

This information needs to be up-to-date and therefore also needs to track **changes** in plantings including new plantings, replacements and removals in a timely manner.

Knowing the **age** of vines (particularly in relation to whether the vines are bearing or non-bearing) is helpful in forecasting yield and can be used as an alternative to recording actual or average production.

To maintain an accurate and up-to-date register that stores all these attributes, **ownership details** are also required, so that accurate information can be provided to the NVR, records can be stored against the owner's name, changes can be tracked, and owners can be communicated with regarding updating their records<sup>8</sup>.

### Additional potential features for the National Vineyard Register

The National Vineyard Register Framework Project provides an opportunity to think about what other features and functionality could be included that would benefit the sector – for example in terms of more efficient and better targeted vineyard management, biosecurity, technology adoption, sustainability, traceability and provenance.

#### Geospatial location

Demand for winegrapes is largely determined by the location of the vineyards, due to wine style requirements that relate to climate, labelling requirements, marketing preferences or logistical considerations (for example a winemaker in Margaret River would incur practical difficulties and additional costs in attempting to purchase grapes from the Granite Belt).

However, knowing the *exact* spatial location of the vineyard block is not normally required for this purpose – it could just be identified in terms of its GI region.

A **geospatial register** would provide the exact location, shape and size of a vineyard and its blocks (or even rows), which in turn could allow:

- growers to be contacted where their vineyard blocks fall within a biosecurity incursion or exclusion zone, a fire danger area or flood risk zone, or to advise of burn-offs or land-use changes specifically affecting vineyards etc.,
- growers to prepare maps of their vineyards incorporating aerial imagery, including hyperspectral imagery, that allows greater understanding of crop health, variability, irrigation leaks, etc. Standard imagery also enables mapping of vineyards and sites for asset management, risk management and infrastructure maintenance, and/or
- high level industry analysis of the supply base by elevation, micro-climate, rainfall, soil type or any other geospatial attributes.

---

<sup>8</sup> It is not intended that this information would be shared or made public

The costs relative to the benefits of including geospatial data would need to be weighed carefully. The additional benefits would come with significant additional costs – in particular the much more detailed information that would have to be provided (and regularly updated) by the grower and the complexity of the register/database or platform that would be needed to support the data and functionality.

The ultimate geospatial database would also record the *varieties* by spatial location – e.g. by tagging blocks (or rows) with the variety name. This would massively increase the amount of data required to be provided, stored and updated.

### **Additional attributes of plantings**

Collecting data on the rootstocks and clones of each variety block would be helpful for a number of applications – including gathering data on the performance of different rootstocks and clones in different regions (climate conditions) and mapping changes in performance over time, and in relation to climate and weather variations. It would also have biosecurity applications – e.g. the presence of phylloxera-resistant rootstocks in areas that are, or could be, affected by phylloxera. However, it would greatly increase the amount of data required, as well as adding to the complexity of tracking changes to plantings and recording block attributes where grafting of a new variety occurs on top of an already grafted vine.

Yield data could also be recorded, potentially providing growers with useful historical information on their block and the ability to generate regional or varietal benchmarks against other vineyards.

### **Compliance functionality**

Growers and wineries are required to carry out various compliance and record-keeping related obligations in accordance with existing legislation. For example:

- in accordance with the *Wine Australia Act 2013* (Cth)'s Label Integrity Program, for each grape delivery of grapes, a written record must be made containing:
  - the grower's name and address,
  - the receiver's (or winery) name and address,
  - the date the grapes are supplied,
  - the quantity of the grapes supplied and
  - the vintage, variety and prescribed Geographical Indication of the grapes,
- in accordance with levies collection legislation (presently the *Primary Industries Levies and Charges Collection Act 1991* (Cth)), wine processors who submit a return for the Grape Research Levy (paid by growers and remitted by wineries on their behalf; calculated on the volume of tonnes harvested) pass on grower details and information about tonnes harvested to the Department of



Agriculture, Fisheries and Forestry, which collects two levies (the Grape Research Levy and the Wine Grape Levy) on behalf of Wine Australia,

- spray diaries must be kept by grape growers to verify compliance with the *Australia New Zealand Food Standards Code* (and/or the laws of relevant export markets), and
- biosecurity-related records (e.g. for Plant Health Certificates) must be maintained in accordance with state/territory-based legislation.

A platform such as the NVR might be able to support these obligations by, for example, digitising the data, automating reports and improving the accuracy of storage, streamlining compliance and removing duplication of reporting. While it is not anticipated that the NVR would be built with any specific additional functionality at this stage, it could be built in such a way as to support such additional functionality in future, should it be desirable to do so.

### **Potential integration with other platforms and applications**

There are significant opportunities for future development of the Register to provide other functionality and/or integrate and interoperate with other data platforms.

Examples include:

- spray diaries and spray management platforms
- asset management
- hazardous chemical inventory management,
- irrigation planning etc.

### **Consultation questions on data**

What data should the National Vineyard Register collect?

- What are the 'must haves' and the 'nice to haves'?
- Is there anything that definitely should not be collected?
- What protections should be put in place to protect the data security and privacy?
- How often should the data be updated?
- What limitations should there be on how the data is used?
- What outputs should be provided? (e.g. a dashboard of summary statistics, individual benchmarks, regular articles / presentations on the insights from the data)

[Back to top of paper](#)

## How should the data be collected?

The data for the National Vineyard Register could be collected directly from growers, or indirectly via other sources – or possibly as a combination of these. The method chosen will fundamentally affect how the register or platform is built, what data it can collect and what other benefits can be derived from it.

The main options, and potential pros and cons of each, are outlined below.

### Direct collection from growers via a survey

Growers could be sent a survey and asked to provide the information regarding their current planting details and any changes since the previous survey. This is how the ABS Vineyard Survey was conducted over many years. An enhancement to the basic approach would be to send out copies of the grower's previously reported data and ask for any updates and changes to be advised – saving them from having to repeat the same information each time.

For such a method to work, it would require an accurate and up-to-date database of vineyard owners including the best contact person (sometimes not the owner but a manager). Maintenance of such a system would require an ongoing administration cost, and identifying all growers in the first place, particularly if participation were not mandatory, would be challenging.

Pros could include:

- a) relatively straightforward to administer – same method as used by the ABS Vineyard Survey for over 20 years
- b) easy for growers to complete – e.g. a simple online survey or paper form – especially if the form were pre-filled with their existing records, therefore creating a low imposition on their time and no requirement for specific computer software, technology or computing skills.

Cons could include:

- a) significant administration cost to distribute the survey each time (especially if a postal option were offered) and follow up to ensure its completion and return
- b) requirement for processing of the data received into the central data register – ie double-handling of all the data
- c) likely low response rate if the survey were voluntary
- d) no obvious direct benefits for the growers – they would need to go to other sources such as an industry dashboard to find the aggregated data and insights and would not have the ability to access other functionality and benefits as suggested above
- e) lack of currency of data – e.g. an annual survey would be up to 12 months out of date

## Grower login to an online platform

Growers would have a login to an online platform where they would record their data and maintain their records. This option would enable full integration of spatial data and the recording of other information such as spray programs, operating costs and activities, as well as supporting other applications and uses.

### Pros:

- a) far greater capability to incorporate additional functionality (now or in the future)
- b) ability to accurately record exact spatial layout of vineyards
- c) timely updates if growers are regularly using the platform
- d) potential to incorporate direct and immediate benefits to the grower – e.g. supporting vineyard management activities, benchmarking, compliance with other reporting requirements
- e) logins to a common platform allows for flexibility in determining rules for access to information by different user groups

### Cons:

- a) far greater investment of time by the grower to provide the information required
- b) requirement for a high level of technology and computing skills on the grower's desk to participate
- c) initial sign-up and data ingestion would require considerable support – probably one-on-one training sessions – at a very high administrative cost
- d) harder to integrate data into summarised statistical outputs (especially geospatial data)
- e) complex and expensive to build and maintain the platform

## Indirect data collection or mixed method

Sources of data related to vineyards already exist – e.g. the Vinehealth Australia database, MapVit, grower databases in Riverina and Murray Valley, CCW's grower database, the GrapeWeb and GrapeLink winery management systems and other winery databases of their own vineyards and those of their contracted growers. It might be possible to pull information from a number of these (and other) sources to obtain a picture of the supply base in Australia.

### Pros:

- a) makes use of existing data sources
- b) no additional imposition on growers
- c) no need for growers to participate actively therefore no administrative load in raising awareness and recruiting participants
- d) relatively low cost to obtain data as the number of contributors is reduced

## Cons:

- a) unlikely to achieve full coverage and therefore accuracy required
- b) not all data sources would collect the same information or in a standardised way
- c) data sources may provide duplicate information (e.g. multiple wineries may hold data on the same grower)
- d) considerable work required to build APIs, unique identifiers, common data rules etc. to bring the data together
- e) regulations and privacy rules on the organisations holding the data may prevent them from sharing with another organisation
- f) central register would not hold individual grower contact details and therefore would not be able to contact them directly – would rely on multiple other organisations to communicate with growers which would be inefficient and limit usefulness of the Register as a communication tool
- g) may be particularly difficult to manage regular updates as it relies on the schedules of other organisations

While it is not likely that an indirect method alone could achieve the level of accuracy required for a full picture of the supply base, an indirect / mixed method of data collection as the initial source, with validation and updates from vineyard owners, may be effective as a hybrid model that is less onerous for growers.

There may also be the potential for a national vineyard scan to be completed remotely, as was done previously (the [National Vineyard Scan](#)), which would provide information on the overall area of vineyards by location. Such a scan, repeated regularly, could be used as the foundation for a platform. However, without contact details or variety details, it would not (on its own) achieve the minimum requirements of the NVR.

## Consultation questions on data collection

How should the data for the NVR be collected?

- Which method is likely to be most acceptable, and why?
- What level of accuracy (coverage) is required or appropriate in order to produce meaningful information?
- What is the best way to achieve the necessary or desirable level of accuracy?
- If data collection were mandatory, what protections, limitations or requirements do you feel are necessary?
- Do you believe a non-mandatory collection of data would achieve sufficient coverage to make the NVR effective?

[Back to top of paper](#)

## How should the Register be maintained and resourced?

The success of the NVR will depend on its financial sustainability in the long term.

Whichever solution for building the Register is chosen, significant ongoing resourcing will be needed after implementation for the management of the Register, maintenance of the technology, ongoing software and licensing costs, and ongoing support for the users of the system – in addition to the data analysis, reporting and dissemination of information and insights.

While the development and establishment of the NVR has been funded by the Commonwealth Government, the full roll-out and ongoing management is not funded, and therefore annual funding will need to be sourced. This could come from the Commonwealth Government, industry levies or potentially a user-pays approach (or a combination of sources).

Another related consideration is who should maintain the NVR. Consideration needs to be given to which organisation has the capacity, security, capability and mandate for such an important function. Funding and ownership could potentially be separate from management.

### Consultation questions on register ownership, management and funding

How should the NVR be maintained and resourced in the long run?

- Who should own it?
- Who should manage it?
- How should it be funded?
- Would there be any support for a user-pays model – e.g. for some functions of the NVR?

[Back to top of paper](#)